# WINNING STARES. TO A SERVICE TO

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

#### 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

#### 1998 ENVIRONMENTAL EDUCATION GRANT PROFILES

#### **DELAWARE**

#### Center for Inland Bays - \$3,714 Bruce Richards, Ph.D., P.O. Box 297, Nassau, DE 19969

Public Service Announcements on Environmental Issues Concerning Delaware's Inland Bays
The Center for the Inland Bays, in partnership with the Delaware Audubon Society, will produce 8 thirtysecond public service announcements (PSAs) for television and radio, covering topics related to regional
environmental concerns faced by the residents of the inland bay's watershed.

Issues discussed will be nutrient over enrichment and wildlife habitat protection and how human activities impact these problems. Specific environmental topics, such as how shore birds are impacted by dredging and why excess sea lettuce is being found in the bays will also be addressed.

## Delaware Department of Natural Resources and Environmental Control (DNREC) - \$5,000 Marjorie A. Crofts, D450, 89 Kings Highway, Dover, DE 19901

Air Curriculum for Delaware (The Three R's for Today and Tomorrow)

The program, entitled "The Three R's for Today and Tomorrow...a Waste Minimization/ Pollution Curriculum, Waste and Air Section" will use combined information from the 1990 Clean Air Act Amendments; state implementation plans; and ozone standards with curriculum activities for the state's "New Direction for Education in Delaware" educational standards. The work-based learning experience will include a tour of an air quality monitoring station and teacher workshops. The curricula, when developed, will focus on activities for grades K-12.

#### Kalmar Nyckel Foundation - \$5,000 Andrew McKnight, 1124 East 7th Street, Wilmington, DE 19801

Challenge Program - building awareness of the environment and environmental justice for at-risk youth in Wilmington.

Students will participate in a boat building class that will allow them to gain an understanding of marine environments and learn more about environmental factors affecting the Christina River and its watershed, including sewage outflows, commercial shipping, runoff and recreation. The students will use microscopes, take water samples, compare the samples of different bodies of water in the region and canoe. The class will also have the opportunity to sail on an oyster schooner on the Delaware Bay. Many of Wilmington's industries are located on the rivers, and the Challenge Program intends to educate students on how river water quality affects them.

#### MARYLAND

#### Charles County Community College - \$4,350 Jonathan Bair, P.O. Box 910, Charles County, LaPlata, MD 20646-0910

Internet Workshop for Environmental Trainers

Funds will help sponsor and develop a one-day hands-on workshop to improve the skills of Maryland Center for Environmental Training instructors, using computers and the Internet to promote learning. The workshop will provide an overview of software and hardware, Internet basics and on-line resources. Participants - local environmental protection experts - will learn practical ways to perform research and gather information via the Internet and to encourage use of the Internet by students. The training team is made up of operations specialists, engineers, electrical and instrumentation experts, microbiologists, utility management and financing professionals.

#### Patuxent River 4-H Center Foundation - \$4,775 Raymond Bivens/Bonnie Dunn, 18405 Queen Anne Road, Upper Marlboro, Prince George County, MD 20774

Environmental Career Launching Workshop

The Patuxent River 4-H Center Foundation is a 134 - acre environmental education facility that provides programs for the Maryland, Washington D.C./Metropolitan area. The Foundation, which will be partnering with the Maryland National Capital Park & Planning Commission (MNCPPC) and Southern Maryland Cooperative Extension Offices (CES) will create a public education program, focusing on health related issues and the agriculture industry. The program includes over-night environmental education sessions involving students, teachers and parents in two days of intense hands-on learning. Water education workshops will also be offered to teachers and other community leaders that work with the youth. Information flyers will be distributed to science teachers throughout Southern Maryland.

#### Southern Maryland Resource Conservation and Development Inc. - \$4,985 Kenneth J. Hafner, 303 Post Office Road, Suite B4A, Waldorf, MD 20602-2702

Mitchell Elementary Schoolyard Habitat

This grant will support an environmental education program that Southern Maryland Resource Conservation and Development, Inc developed in partnership with the Mitchell Elementary School in LaPlata. The program involves the use of alternative ground covers and natural plant species to form a schoolyard habitat consisting of a butterfly garden, wetland nursery, organic gardens, forested area, nature trails and a stream monitoring station. Approximately 600 students of diverse ethnic background will be involved in the project which will serve as a demonstration to the entire community of LaPlata and should result in an actual reduction of non-point source pollution of the Potomac River and Chesapeake Bay.

#### **PENNSYLVANIA**

#### Allentown School District - Cleveland Elementary School - \$4,330 Jane Dotter, 31 South Penn Street, Allentown (Lehigh Co.), PA 18101

Support of the Grover Cleveland Elementary School's Environmental Education Program

This grant will be used to introduce students grades 1- 4 to several nature study areas in the greater Allentown area, and to help them become directly involved in learning the basics of ecology and in making informative environmental decisions. The grant will also provide the means to train teachers, develop services for staff-in training, environmental in-services, transportation and equipment for hands-on exercises in student activities at the study areas. This grant is a continuation of funding received last year to start the program, a business-education partnership with PPL Resources, an electric utility with corporate headquarters close to the school. Because of its success, the program has expanded into five additional district elementary schools.

Berks County Outreach Initiative Watershed Awareness on a Local Level

This is an environmental education project at the Berks County district schools. The program will help all high schools in the Berks County district open discussions concerning watershed improvement techniques. The initiative will promote community involvement and local awareness; possible solutions to problems occurring in the area will also be discussed.

#### Children's Museum of Bloomsburg - \$4,763 Diane Wukovitz, P.O. Box 192, Bloomsburg, PA 17815

Natural Bridges - Pathways that Connect Us to Nature"

This exhibit was part of the 1998 Summer Art and Science Center which appealed to all ages - parents, educators and tourists. The multi-activity, hands-on exhibit sought to stimulate visitors' environmental awareness by encouraging them to experience the interrelatedness of the living and non-living things around them. By presenting a variety of environmental situations, visitors will be encouraged to think about ways individual and community decisions affect the health of their natural environment.

#### Clean Water Fund - \$5,000

#### Robert Wendelgass, 607 Penn Avenue, Suite 212, Pittsburgh, PA 15222

Children's Health Education Project

Through presentations and workshops, the Project will educate students, teachers and parents in the Pittsburgh area about potential threats to the health of children from environmental pollution in their schools, helping them apply the tools they learn to an analysis of their own school environment. Focusing primarily on pesticide use in schools, the project will train parents and teachers how to research and analyze pest control practices in their school district; develop alternative strategies while reducing pesticide use; and with school officials, plan a new, less toxic pest control strategy.

#### Clearwater Conservancy of Central Pennsylvania - \$5,000 Kristen Saacke Blunk, P.O. Box 163, State College, PA 16804

"Students - Community - Streams - Connection"

This program will help foster student relationships with Center County based streams, primarily Chesapeake Bay headwater streams. Activities will include collecting water plants for art projects and discussions, writing poems, constructing water flow charts for primary elementary students. For the intermediate elementary students: studies of temperature, depth, PH turbidity, speed and direction of water will be conducted. The middle to junior high school students will be more involved with scientific investigations and working with community groups. The senior high school participants will monitor biological, physical and chemical parameters of the stream; establish a website and become mentors to the younger students in the program.

#### El Comite de Apoyo a los Trabajadores Agricolas (CATA) - \$20,000 Nelson Carrasquillo, 4 South Delsea Drive, P.O. Box 510 Gloucester County, Glassboro, NJ 08028

Pesticide Education Outreach Program

This program will seek to educate the approximately 11,000 Mexican migrant workers and their families living in the southern portion of Chester County, PA on environmental justice issues, particularly pesticide safety, preventing contamination and their rights under pesticide laws. The workers will be encouraged to take a more active role in protecting themselves and their families. Workers will have the opportunity to participate in interactive learning programs, role playing and encounter case scenarios. This education is necessary in order to successfully achieve the goals of the EPA's Agricultural Workers Protection Standard.

Outside Environmental Land Lab - Four Trails: Wetlands, Soil, Water, Ecosystems

This program will increase student and teacher environmental awareness in the Marion Center Area School District, a rural school district located in Indiana County. They will operate a handicapped accessible environmental education center, offering an outdoor trail, interactive student work stations, and guest speakers. The program will target the 1,997 students in the district, plus Boy Scouts and Girl Scouts, the Audubon Society, Friends of Parks and individuals and families. The economy in this rural area is based on agriculture, coal and natural gas which makes abandoned strip mines, contaminated streams, degraded drinking water and other environmental issues present in the county. The Marion Center Area Environmental Education Center will seek to address environmental issues affecting the area, region and world through education and community-based programs.

#### Northern Bedford County School District - \$3,740 Jerry W. Young, HC 1, Box 200, Loysburg, PA 16659

"Water Connections"

This grant will be used to help augment a revised sixth grade science curriculum called "Water Connections". Approximately 90 sixth grade students will study water quality concepts in the local wetlands. Students will identify local water quality problems, including issues such as the Hog Farm controversy in the county. They will follow Bedford County waterways to the Chesapeake Bay to identify how local problems effect the bay. Students will travel to Baltimore to learn about water quality problems of the Bay and conduct the same water quality tests on bay waters. The grant funds will help support testing and travel costs; and help to publish and distribute a public awareness pamphlet.

#### Stroud Water Research Center - \$5,000 Kristen Travers, 970 Spencer Road, Avondale, PA 19311

Red Clay Creek Monitoring Project

The Stroud Water Research Center, a non-profit environmental research center, proposes to begin a monitoring project with Kennett High School biology classes for a water monitoring project at the Red Clay Creek. These high school students will study specific local water quality issues, while gaining practical skills and ultimately become better equipped as participating decision makers within their community. The funds will be used to support teacher and student training and to purchase equipment.

#### The Vanguard School - \$1,320

#### Carolyn Brunschwyler, P.O. Box 730, 1777 N. Valley Rd., Paoli, Chester County, PA 19301

Design, plant, and monitor a campus butterfly garden

The Vanguard School's science department and Junior Achievement Club, in cooperation with Valley Forge National Park and the NOVA Society of Lockheed Martin Corporation have proposed to design, plant, and monitor a campus butterfly garden. Students with learning differences from the lower and middle schools will design and construct this garden. The Vanguard School shares its campus with 110 students from the Crossroads School, who will also have the opportunity to experience this learning laboratory. The science curriculum for both schools will include units relevant to the garden. The butterfly garden will be both a habitat creation enjoyed by students, faculties and guests of the schools and a restoration area for butterflies and insects lost through local development.

#### West Chester University - \$4,885

#### Charles V. Shorten, West Chester University, Chester County, West Chester, PA 19383

Chester County Local Emergency Planning Committee Web Site Development

The purpose of this grant is to establish an electronic presence for the LEPC on the Internet that will serve as a focal point for education of the public regarding hazardous material incidents and preventive activities. The project will include the establishment of a Chester County LEPC World Wide Web site and publicizing the site to the general public, the regulated community, and the response organizations of the County.

This training program will provide a living ecological education experience for elementary school teachers. The goal of the program will be to help teachers develop experiential-based curriculum that meets the environmental education standards of the State of Maryland, while strengthening the educational resource relationship between the Wildfowl Trust of North American and Maryland's public schools. The program's participants, a maximum of 20 teachers from different backgrounds and schools, are expected to directly reach approximately 600 students within the first year.

#### Wildlife Information Center - \$2,400 Dan R. Kunkle, P.O. Box 198, Slatington, PA 18080-0198

Young Ecologists Camp

Working with the Trexler Trust, the William Penn Foundation and the Boys and Girls Club of Allentown, The Wildlife Information Center is sponsoring the Young Ecologists Summer Camp. Funding will cover camp costs, equipment and instructor salaries. Participants will be 16 children between grades 7-9 who will study issues relative to the Kittatinny Raptor Corridor. This program will focus on water quality, land use, wetlands and wildlife conservation. Environmental justice issues and career development will also be covered.

#### Wyncote Audubon Society - \$5,000 Janet Starwood, 1212 Edge Hill Road, Abington, PA 19001

"Birds for a Purpose"

"Birds for a Purpose" support the goals recommended by the national science guidelines and targets under-served urban areas. The program offers practical approaches to 4th, 5th and 6th grade natural science education by combining classroom work and environmental field research with hands-on environmental analysis and restoration projects inside the students' neighborhood. Because birds are indicators of the health of ecosystems, the curriculum focuses on birds and bird habitat as a way for students to learn about ecology, natural science processes, and how healthy ecosystems are essential for sustaining life on earth. Similar pilot programs have been successful in New York City schools.

#### York County WMCA - \$4,651 Nancy Eberly, 90 N. Newberry Street, York, PA 17401

Camp Spirit

The program will teach approximately 3,000 children, ages 5-18, and 40 teachers, the Spirit IDEA - Informed Decisions for Environmental Action. The objectives of the program aim to increase the participants understanding of the environment in all areas, including outdoor-living survival skills; to stimulate critical and creative thinking; to develop the ability to make informed decisions and to instill the confidence and commitment to take responsible actions.

#### **VIRGINIA**

#### Alleghany Highlands YMCA - \$4,330 Ward H. Robens, Jr., P.O. Box 905, Covington, VA 24426

Earth Services

Earth Services, a community service program, focuses on training teens in environmental education and community service. The funds will be used to empower teens to make their own positive decisions and be involved in the community; promote global environmental understanding and action through education, project development and leadership training, organize a long-term partnership between teenagers, teachers, community leaders, business, government and non-profit organizations. The program, which is open to all middle and high school students, will serve 200 teens and involve 8 teachers, five businesses and completion of over 500 hours of community service work.

#### American Lung Association of Richmond - \$25,000 Deana Haggerty, 311 South Boulevard, P.O. Box 7065, Richmond, VA 23221

Teaching Elementary Students Today (TEST)

TEST aims to have 240 high school students teach elementary students about various lung diseases, including asthma, allergies, smoking, second hand smoke, indoor and outdoor air pollution. The high school students will

adopt a school and act as mentors to third and fourth grade students in the Richmond Tri-Cities area (cities of Richmond and Petersburg and the counties of Chesterfield, Hanover, and Henrico). The program will reach 1,200 students (100 per school) and their teachers. TEST can be sustained after the initial implementation year by the school coordinators who will continue to recruit and train student mentors

# Commonwealth of Virginia Department of Game and Inland Fisheries - \$6,498 Mr. Raymond E. Davis, Virginia Department of Game and Inland Fisheries, 4010 West Broad Street, Richmond, VA 23230-1104

Wildlife Mapping in Virginia

This program provides an opportunity for citizens, community groups, school children and others to contribute their observations of wildlife to the state's biological databases. Through two workshops, each accommodating 20 people, participants will learn to inventory and monitor wildlife, identify habitat and read maps. One of the workshops will train 20 facilitators with a potential to reach 400 other people. The other workshop will train participants how to become Wildlife Mappers. For assistance in wildlife identification, experts, or wildlife mapping mentors are consulted. Educators may integrate the program into existing curricula and subject area.

#### Rockbridge Conservation Council - \$4,800 Mollie J. Messimer, Ph.D., P.O. Box 564, Lexington, VA 24450

"Roots and Shoots at Central Elementary School"

This program aims to teach elementary students, in an informal, real world setting about environmental issues encouraging environmental careers. This project will involve 340 children in grades K-5 at Central Elementary School in Western Virginia. Students will attend 90-minute sessions in the classrooms, geared toward the academic level of each grade. Field trips for each grade are also included in the program. Activities will be geared toward the academic level of each grade fitting in with the state's Standards of Learning.

#### Stafford County Public Schools - \$14,882

### Russell L. Watson, Stafford County Public Schools, 1729-A Jefferson Davis Highway, Stafford, VA 22554

Environmental Action Through Service Learning Class

Stafford County is the second fastest growing county in the state of Virginia. This pilot project will establish a service-learning class, entitled Environmental Action, at North Stafford High School. This pilot class will combine community service and a formal education curriculum. The class will go beyond the academic study of the environment, exposing the students to new ideas, people, and expertise. Ideas, such as the vulnerability of the 2 local rivers, the Rappahannock on the south and the Potomac on the north, and of wildlife habitats, will be discussed.

#### WASHINGTON, D.C.

#### Coordinating Committee for Automotive Repair (CCAR) Sherman Titens, 11301 Nall Avenue, Suite 203, Johnson County, Leawood, KS 66211

Teacher In-service Training for Automotive Education Instructors at Secondary,

Post-Secondary and Industry Schools

The goal of this grant is to provide training to the individuals who will then train automotive shop owners and technicians. The Coordinating Committee for Automotive Repair is completing the development of an environmental information program which will contain compliance and pollution prevention information to be made available in a self-study format. Included within this package will be compliance, pollution prevention, historical information and federal, state and university resources available to shop owners and technicians to assist them in complying with applicable environmental regulations.

#### Lt. Joseph P. Kennedy Institute - \$5,000

#### Donna Degnan, 801 Buchanan Street, NE, Washington, DC 20017

Students Impacting their Urban Environment

The Kennedy Institute is an ungraded, 12-year special education day program. This program will adapt existing environmental education curricula and field methods to develop a functional environmental education theme unit for predominately minority special education students in an urban multicultural setting. Participants will gain a greater awareness of real-life local environmental issues. Students will learn about urban air and water pollution and its

impact on human health and the local ecosystem. The classes will also study the impact of population growth and decline and its relationship on the urban areas and climate as well as discussing job opportunities in the environmental field.

#### **WEST VIRGINIA**

#### **Shephard College Foundation - \$15,270**

#### Dr. James Watson, Shepherd College, Shepherdstown, WV 25443

This grant will enable Shephard College to continue to develop its internal undergraduate environmental education program and to enhance its outreach to the regional public schools by providing funding for student work in the field, conferences and workshops. Funding will also enable the program to obtain portable air, water and soil testing kits that will enhance both on-campus teaching and off-campus continuing education courses with public school teachers.